

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



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OFFICE OF

SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Immediate Removal at the Johns-Manville Asbestos Disposal Sites,

Hudson and Nashua, New Hampshire -- ACTION MEMORANDUM

FROM: William N. Hedeman, Jr., Director

Office of Emergency and Remedial Response (WH-548-B)

TO: Lee M. Thomas, Acting Assistant Administrator

for Solid Waste and Emergency Response (WH-562-A)

Issue

Region I has requested funding of \$750,000 to initiate an immediate removal actions at asbestos disposal sites generated by Johns-Manville Company in Hudson and Nashua, New Hampshire.

Background

The Johns-Manville Company, formerly located in Nashua, New Hampshire, disposed of over 70,000 tons of asbestos wastes (sheets, pellets, and dust) on private property at several sites in Nashua and nearby Hudson, New Hampshire. The disposal operations started in the 1960's and ended in 1972.

Six sites are addressed in the proposed immediate removal:

- A. Bursey site, 240,000 square feet, is a large open area used for dirt biking, shotgun practice, and general recreation for local children and adolescents. A popular drive-in restaurant is located 100 yds. to the north along Route III, the main road through Hudson and Nashua.
- B. Alukonis site, 11,000 square feet, is a vacant lot immediately west of the Bursey site. An occupied residence borders the site to the east.
- C. Baker site, 10,400 square feet, is west of Alukonis site along Route 111. Waste is disposed of behind a gasoline service station, and vehicles park directly on the asbestos fill.

- D. Matarazzo site, 105,000 sq. ft., is about 1 1/2 miles northeast of the first three sites mentioned, along Route 111. Motel and several residences are located within 500 feet of this site, it is also a dirt bike and recreation area for local children.
- E. Sprague site, 30,000 sq. ft., is in residential Nashua at the end of Intervale Street. A residence is next door to the west.
- F. Coulombe site, 11,400 sq. ft., is in a populated area of Hudson at Musquash and Wasson Roads. The site is in the front yard of a residence, and is used as a play area; part is covered with gravel driveway.

The asbestos fill at these sites is, for the most part, exposed to the air. Over the years, weather and disturbance by vehicular traffic, dirt bikes, foot traffic, and landscaping have decomposed much of the asbestos material so that it is very friable, crumbling easily to airborne dust. The asbestos concentration is 90% of the fill material.

The site was not submitted as a candidate for the National Priority List because an enforcement case was proceeding.

Nature of Threat

The primary threat is ongoing exposure to a known carcinogen. Airborne asbestos particles, inhaled into the lungs, are a proven contributor to lung cancer asbestosis (long-term, high-level exposure), gastrointestinal tract tumors, and mesotheliama (contracted from short-term, low-level exposure). The asbestos is found in large quantities on the surface, and includes dust and friable materials easily converted to dust. When this material is dry and is distrubed by traffic or wind, particles can remain airborne for long periods and be easily inhaled.

Hundreds of people live on or near these asbestos sites, their children play in these areas, and thousands of others travel along Route III which is bordered by open asbestos sites. Consequently, the population at risk is large and particularly susceptible to long-term diseases.

A secondary threat is asbestos run-off into surface water. Streams near the asbestos fill areas are tributaries to the Merrimack River, which is a source of drinking water to downstream communities. No maladies have been traced to ingestion of asbestos particles through drinking water, however.

Enforcement Status

See attachment.

Actions Taken

Enforcement actions have been taken, but the only site work by EPA has been investigatory. Neither State or local agencies have addressed the problem of limiting exposure to the asbestos. The State did sign a current decree to have one of the sites covered, but apparently no actions were ever taken.

Johns-Manville, prior to declaring bankruptcy, filled and seeded two asbestos disposal areas along Virginia Drive in Hudson, New Hampshire. Recent inspections found the area was adequately covered. The owners of several of the other sites have covered part of the asbestos fill with gravel, sand, wood chips, or soil and vegetation, but the efforts have not been adequate to mitigate the release of asbestos dust and the risk of exposure.

CDC Health Advisory

On May 20 the Centers for Disease Control (CDC) was requested by EPA to prepare a public health advisory for the Hudson-Nashua asbestos sites. On June 13 the advisory was completed and received in EPA Headquarters on June 15. The advisory basically concurs with EPA's proposed removal action. The advisory concludes that each site needs action to prevent exposure to respirable airborne asbestos fibers and procedures must be followed during cleanup to prevent asbestos exposure to both workers and the public. The memorandum to the record supporting the health advisory specifically states that access to each of the sites by the public should be prevented immediately.

Proposed Actions

Region I has proposed to grade, cover to 30 inches, loam, and seed five areas totalling almost 400,000 square feet. One site, the Baker site behind the service station, would instead be graded and asphalted to 3 inches, due to the traffic and parking on that area. Each site will be graded to allow for surface drainage, and the Matarazzo site will require a retaining wall, drainage swale, and culvert. The total estimated extramural cost is \$750,000.

One of the sites, the Coulombe site, is the front yard of a private home. Cover cannot be applied without causing severe drainage problems. Continued use of the area by the residents also precludes leaving the asbestos in place. At CDC's recommendation, the Coulombe family (nine people) will be temporarily relocated to minimize their exposure while work is ongoing.

Adjacent to the Alukonis site lies the Rheaume residence. Based on the close proximity of the asbestos to the home and the lack of natural barriers to wind-borne asbestos, the two occupants of the Rheaume residence must also be temporarily relocated. Another home, the Graham residence; will be temporarily relocated if the OSC determines monitoring data dictates it. In summary, a total of two residences, occupied by eleven people, must be temporarily relocated. One additional home, having two people, may require relocation.

Several of the sites will be temporarily fenced until an adequate vegetative cover is established.

At CDC's recommendation, extensive air monitoring (sampling and analysis) will be conducted to assure that air releases during cleanup activities are minimized. The closure and decontamination of several nearby buildings may also be required. These activities are included in the cost summaries for each site.

A seventh site, the Pointer site, is being considered for removal actions. The site has been partially covered and requires further investigation before a removal is initiated, however. Additional funding may be requested if the Region concludes a cover is required.

The option of excavation of the asbestos at all six sites (70,000 tons) was not chosen due to the prohibitive cost and much greater scope of evacuation required. Excavation of all sites would greatly increase the chance of asbestos exposure to the surrounding population.

The proposed action limits asbestos migration into the air and surface water, the pathways of potential threat. Posting and follow-up inspections will be necessary to ensure that natural weathering, erosion, human disturbances, and other factors do not re-expose the asbestos in the future.

FEMA Involvement

Based on their close proximity to the asbestos sites EPA has requested that FEMA conduct the temporary relocation of two residences while the cleanup is in progress. The maximum time required for relocation is about two weeks. At the discretion of the EPA OSC, FEMA may be requested to relocate at least one additional residence.

OERR Recommendations

Based on the information submitted, I recommend that the request for an immediate removal action at the Johns-Manville asbestos disposal sites be approved, with an extramural project ceiling of \$750,000.

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Nonconcur:	Date: